

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1-52. (Canceled)

53. (Currently Amended) A method for eliciting an immune response against an A/E pathogen, or component thereof, in a ruminant comprising administering to the ruminant an effective amount of a composition comprising[[: i]] an isolated polypeptide which comprises an amino acid sequence having at least 81% sequence identity to the sequence of SEQ ID NO: 24 or ~~an immunogenic fragment or variant thereof, or ii) — a cell culture supernatant which comprises an isolated polypeptide comprising an amino acid sequence having at least 75% sequence identity to the sequence of SEQ ID NO: 24, or an immunogenic fragment or variant thereof,~~ thereby eliciting an immune response in the ruminant.

54. (Currently Amended) A method for reducing colonization of an A/E pathogen in a ruminant, the method comprising administering to the ruminant an effective amount of a composition comprising[[: i]] an isolated polypeptide which comprises an amino acid sequence having at least 81% sequence identity to the sequence of SEQ ID NO: 24 or ~~an immunogenic fragment or variant thereof, or ii) — a cell culture supernatant which comprises an isolated polypeptide comprising an amino acid sequence having at least 75% sequence identity to the sequence of SEQ ID NO: 24, or an immunogenic fragment or variant thereof,~~ thereby reducing colonization of the A/E pathogen in the ruminant.

55. (Currently Amended) A method for reducing shedding of an A/E pathogen in a ruminant comprising administering to the ruminant an effective amount of a composition comprising[[: i]] an isolated polypeptide which comprises an amino acid sequence having at

least 81% sequence identity to the sequence of SEQ ID NO: 24 or an immunogenic fragment or variant thereof, or ii) a cell culture supernatant which comprises an isolated polypeptide comprising an amino acid sequence having at least 75% sequence identity to the sequence of SEQ ID NO: 24, or an immunogenic fragment or variant thereof, thereby reducing shedding of the A/E pathogen in the ruminant.

56. (Previously Presented) The method of claim 53, wherein the ruminant is a bovine or ovine subject.

57. (Previously Presented) The method of claim 54, wherein the ruminant is a bovine or ovine subject.

58. (Previously Presented) The method of claim 55, wherein the ruminant is a bovine or ovine subject.

59-70. (Canceled)

71. (Previously Presented) The method of claim 53, wherein the A/E pathogen is enterohemorrhagic *E. coli* (EHEC), enteropathogenic *E. coli* (EPEC), or *Citrobacter rodentium*.

72. (Original) The method of claim 71 wherein the EHEC is EHEC O157:H7 or EHEC O157:NM.

73. (Original) The method of claim 71 wherein the EPEC is EPEC 0127:H6.

74-85. (Canceled)

86. (Previously Presented) The method of claim 53, wherein the composition is

provided in combination with a physiologically acceptable carrier.

87. (Previously Presented) The method of claim 53, wherein the polypeptide comprises 20% of the cell protein present in the composition.

88. (Previously Presented) The method of claim 53, wherein the composition further comprises a EspA, EspB, EspD, EspP, Tir, or intimin polypeptide.

89. (Previously Presented) The method of claim 53, wherein the composition further comprises an adjuvant.

90. (Previously Presented) The method of claim 54, wherein the A/E pathogen is enterohemorrhagic *E. coli* (EHEC), enteropathogenic *E. coli* (EPEC), or *Citrobacter rodentium*.

91. (Currently Amended) The method of claim [[54]]90, wherein the EHEC is EHEC O157:H7 or EHEC O157:NM.

92. (Previously Presented) The method of claim 54, wherein the composition further comprises an adjuvant.

93. (Previously Presented) The method of claim 55, wherein the A/E pathogen is enterohemorrhagic *E. coli* (EHEC), enteropathogenic *E. coli* (EPEC), or *Citrobacter rodentium*.

94. (Currently Amended) The method of claim [[55]]93, wherein the EHEC is EHEC O157:H7 or EHEC O157:NM.

95. (Previously Presented) The method of claim 55, wherein the composition further

comprises an adjuvant.

96. (New) The method of claim 53, wherein the isolated polypeptide is selected from the group consisting of one or more of SEQ ID NOs: 22-24 or an immunogenic fragment of at least 10 amino acids thereof.

97. (New) The method of claim 54, wherein the isolated polypeptide is selected from the group consisting of one or more of SEQ ID NOs: 22-24 or an immunogenic fragment of at least 10 amino acids thereof.

98. (New) The method of claim 55, wherein the isolated polypeptide is selected from the group consisting of one or more of SEQ ID NOs: 22-24 or an immunogenic fragment of at least 10 amino acids thereof.

99. (New) The method of claim 53, wherein the isolated polypeptide is a recombinant polypeptide.

100. (New) The method of claim 54, wherein the isolated polypeptide is a recombinant polypeptide.

101. (New) The method of claim 55, wherein the isolated polypeptide is a recombinant polypeptide.

102. (New) The method of claim 53, wherein the isolated polypeptide is provided in a cell extract and comprises at least 30% by weight of total protein in the cell extract.

103. (New) The method of claim 54, wherein the isolated polypeptide is provided in a cell extract and comprises at least 30% by weight of total protein in the cell extract.

104. (New) The method of claim 55, wherein the isolated polypeptide is provided in a cell extract and comprises at least 30% by weight of total protein in the cell extract.